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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/715,957	11/17/2003	Jiro Moriyama	CFA00047US	4447

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CANON U.S.A. INC. INTELLECTUAL PROPERTY DIVISION
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EXAMINER

GARCIA JR, RENE

ART UNIT	PAPER NUMBER
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2853

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/28/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/715,957	Applicant(s) MORIYAMA ET AL.	
	Examiner Rene Garcia, Jr.	Art Unit 2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 13 is objected to because of the following informalities: claim has the same limitation twice where the second instance provides no additional apparent purpose other than to repeat what has already been claimed, see lines 7 & 13. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claims 1, 10, 11, 12 & 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. Claims provide limitation of “recording unit arbitrarily records the positional information image.” The term arbitrarily is understood to mean random which would indicate that the recording unit is therefore able to print positional information data anywhere within print boundaries of recoding medium and physical capabilities of the recording unit. However this would more than likely result in a positional information image that is useless to the purpose of the invention. Specification on page 2 ¶0005 and page 25 ¶0061,0062 teaches that the positional information image is recorded in a such a manner that the “image” does not overlap the “positional information image” thereby preventing positional information from being read. This teaches away from the recording unit having the ability to “arbitrarily” record said positional information image, since it would indicate that there are recording positions that positional information image can be recorded, not arbitrarily.

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5. Claims 2-9 are rejected because the claims are dependent upon claims rejected under 35 U.S.C. 112 2nd paragraph, and therefore any 35 U.S.C. 112 2nd paragraph rejections must be resolved.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 2 & 4-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Silverbrook et al. (US 2002/0080396).

Silverbrook et al. disclose the following:

*regarding claims 1 & 10, recording apparatus /**netpage printer, 601**/ (fig. 11) and method for forming an image on a recording medium/**netpage, 1**/ (fig. 1; paragraph 0216 see also paragraphs 0148 and 0218), comprising:

*recording unit/**print engine controllers, 760**/ (fig. 14; paragraph 0554) for performing recording by applying a recording material/**ink**/ (paragraph 0243) onto the recording medium/**1**/ (fig. 1), the recording unit/**760**/ recording the image/**graphic data, 2**/ (fig. 1; paragraph 0129) and at least one of a positional information image/**coded data, 3**/ representing positional information (paragraph 0158; x & y coordinates) corresponding to the position where the positional information image/**coded data, 3**/ is recorded, where the recording unit/**760**/ arbitrarily records the positional information image/**coded data, 3**/ (¶0218, 0334, 0335, 0380-0388, 0392 – teaches how the user has the ability to personalize/customize the netpage layout to

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any desired format which makes the coded data associated with tags capable of being printed anywhere so chosen as the final layout to be printed. This allows for the users to arbitrarily decided [done without users knowledge as a behind the scenes process] where the tags will be printed and therefore the printer will printer will print the tags in arbitrarily positions based on user preference(s))

*control unit/**processor, 750/** (fig. 14; paragraphs 0552 & 0553) for controlling the recording (paragraph 0220) such that the recording unit/**760/** records the positional information image with a recording material/**infrared inks, IR-absorptive black ink/** capable of being detected by a predetermined detector/**netpage pen, 101/** (figs. 8 & 9; paragraph 0255), and records the image with another recording material/**inks/** (paragraph 0243; cyan, magenta, yellow, black) incapable of being detected by the detector/**netpage pen, 101/** (paragraph 0151 – cyan, magenta, yellow, black are non-infrared emitting)

*regarding claim 2, recording material/**infrared inks, IR-absorptive black ink/** used for recording the positional information image/**coded data, 3/** contains carbon (paragraphs 0584 – 0592; infrared dyes/**ink/** contain carbon atoms), and the recording material (paragraph 0243; cyan, magenta, yellow, black) used for recording the image/**graphic data, 2/** is carbon-free (fig. 1)

*regarding claim 4, recording material for the positional information image/**coded data, 3/** (fig. 1, paragraph 0129) is black/**IR-absorptive black ink/** (paragraph 0223), and the

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recording material for the image/**graphic data, 2/** (fig. 1, paragraph 0129) is a plurality of recording materials/**inks/** capable of recording a color image (paragraph 0243)

*regarding claim 5, plurality of recording materials/**inks/** correspond to a plurality of colors including yellow, magenta, and cyan (paragraph 0243)

*regarding claim 6, plurality of recording materials/**inks/** have a plurality of colors including yellow, magenta, cyan, and black (paragraph 0243)

*regarding claim 7, positional information image/**coded data, 3/** (fig. 1) is expressed by a combination pattern of a plurality of spots to represent the positional information (figs. 6a, 6b & 6c)

*regarding claim 8, positional information/**coded data, 3/** is associated with coordinates on the recording medium/**netpage, 1/** (fig. 1; paragraph 0159; x & y coordinates)

*regarding claim 9, positional information/**coded data, 3/** is associated with coordinates on a virtual plane beyond the area of the recording medium/**netpage, 1/** (fig. 1; paragraph 0149; multiple pages can have same positional data & each page has unique page ID since recording medium is considered to be one page; paragraph 0157 – region to which a tag [tag ID – positional information] refers can be an arbitrary subregion of a page or other surface [virtual plane])

*regarding claim 11, recording medium/**netpage, 1/** (fig. 1) including:

*pattern image/**coded data, 2/** (figs. 1 & 6a, 6b, 6c; paragraph 0129) designating positions (paragraph 0158; x & y coordinates) at least thereon, the pattern image being/**2/** recorded by applying a first recording material/**ink/** capable of being detected by a predetermined detector/**netpage pen, 101/** (figs. 8 & 9; paragraph 0255), where the pattern image/**2/** is arbitrarily recorded (§0218, 0334, 0335, 0380-0388, 0392 – teaches how the user has the ability to personalize/customize the netpage layout to any desired format which makes the coded data associated with tags capable of being printed anywhere so chosen as the final layout to be printed. This allows for the users to arbitrarily decided [done without users knowledge as a behind the scenes process] where the tags will be printed and therefore the printer will printer will print the tags in arbitrarily positions based on user preference(s))

*image/**graphic data, 2/** (fig. 1; paragraph 0129), different from the pattern image, recorded by applying a second recording material incapable of being detected by the detector/**101/**

*regarding claim 12, recording system comprising (fig. 14 – printer controller):

*recording apparatus/**netpage printer, 601/** (fig. 11) for performing recording by applying a recording material/**ink/** onto a recording medium/**netpage,1/** (fig. 1) according to image data, the recording apparatus/**601/** recording positional information representing positions/**coded data, 3/** (fig. 1; paragraph 0129 & 0158) on at least the recording medium/**1/** and the image data/**graphic data, 2/** (fig. 1), the recording apparatus/**601/** including a control unit/**processor, 750/** (fig. 14; paragraphs 0552 & 0553) for controlling recording such that the

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positional information/**3/** is recorded with a recording material capable of being detected by a predetermined detector/**netpage pen, 101/** (figs. 8 & 9; paragraph 0255), and the image data/**graphic data, 2/** (fig. 1) is recorded with a recording material incapable of being detected by the detector/**101/** (paragraph 0151 – cyan, magenta, yellow, black are non-infrared emitting)

*transmitting apparatus/**print controller, 656/** (fig. 15) for transmitting the image data to the recording apparatus/**netpage printer, 601/** (fig. 11), the transmitting apparatus including image data preparation unit/**DSPs, 757/** (fig. 14; paragraph 0563) and an image data transmission unit/**IEEE 1394 Serial Interface, 659/** (fig. 14; paragraph 0569)

*wherein the positional information image is arbitrarily recorded on the recording medium (¶0218, 0334, 0335, 0380-0388, 0392 – teaches how the user has the ability to personalize/customize the netpage layout to any desired format which makes the coded data associated with tags capable of being printed anywhere so chosen as the final layout to be printed. This allows for the users to arbitrarily decided [done without users knowledge as a behind the scenes process] where the tags will be printed and therefore the printer will printer will print the tags in arbitrarily positions based on user preference(s))

*regarding claim 13, Computer-executable process steps, stored on a computer-readable storage medium, for controlling/**software/** (paragraph 0556) a recording apparatus/**netpage printer, 601/** (fig. 11) for recording an image by applying a recording material/**ink/** (paragraph 0243) onto a recording medium/**netpage, 1/** (fig.1), the computer-executable process steps performing:

*recording (paragraph 0567), on the recording medium, the image/**graphic data, 2/** and a positional information image/**coded data, 3/** corresponding to positional information

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representing positions (paragraph 0158; x & y coordinates) on at least the recording medium/**1/** (fig. 1; paragraph 0129; paragraph 0220 – printing of combination of data), where the positional information image/**3/** is arbitrarily recorded on the recording medium (§0218, 0334, 0335, 0380-0388, 0392 – teaches how the user has the ability to personalize/customize the netpage layout to any desired format which makes the coded data associated with tags capable of being printed anywhere so chosen as the final layout to be printed. This allows for the users to arbitrarily decided [done without users knowledge as a behind the scenes process] where the tags will be printed and therefore the printer will printer will print the tags in arbitrarily positions based on user preference(s))

*controlling (paragraph 0571) the recording such that the positional information image is recorded with a recording material/**infrared inks, IR-absorptive black ink/** capable of being detected by a predetermined detector/**netpage pen, 101/** (figs. 8 & 9; paragraph 0255), and the other image/**3/** is recorded with another recording material/**ink/** incapable of being detected by the detector/**101/** (paragraph 0151 – ink: cyan, magenta, yellow, black are non-infrared emitting)

*wherein the positional information image is arbitrarily recorded on the recording medium (§0218, 0334, 0335, 0380-0388, 0392 – teaches how the user has the ability to personalize/customize the netpage layout to any desired format which makes the coded data associated with tags capable of being printed anywhere so chosen as the final layout to be printed. This allows for the users to arbitrarily decided [done without users knowledge as a behind the scenes process] where the tags will be printed and therefore the printer will printer will print the tags in arbitrarily positions based on user preference(s))

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Silverbrook et al. (US PG PUB 2002/0080396) in view of Tan et al. (US 6,613,403).

Silverbrook et al. disclose all of the claimed limitations except for the following:

*regarding claim 3, recording material used for recording the positional information image comprises one of a pigment ink containing carbon and a dye ink containing carbon, and the recording material used for recording the image comprises one of a carbon-free pigment ink and a carbon-free dye ink

*Silverbrook et al. did not expressly specify which recording material/**ink**/ to utilize

Tan et al. does not disclose the following:

*regarding claim 3, recording material/**ink**/ used for recording the positional information image comprises one of a pigment ink containing carbon and a dye ink containing carbon, and the recording material used for recording the image comprises one of a carbon-free pigment ink and a carbon-free dye ink (col. 9, lines 7-24; allows for inks including dye or pigment and colorant is carbon-free; Tan et al. teaches using carbon free inks so not to interfere with NIRF [near infrared fluorescent] inks)

Silverbrook et al. and Tan et al. are analogous art because they are directed to a similar problem solving area of recording material/~~ink~~/ detection and recording material lack of detection.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to utilize a recording material of dye and pigment containing carbon; and recording material of dye and pigment being carbon-free as taught by Tan et al. into Silverbrook et al. for the purpose of ink detection and lack of detection based on specific properties (infrared detection).

Response to Arguments


10. Applicant's arguments, see page 10 (beginning at second to last paragraph), filed 10 October 2006, with respect to the rejection(s) of claim(s) 1, 2 & 4-13 under 35 U.S.C. 102(b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Silverbrook et al. (US 2002/0080396). It is agreed that Silverbrook et al. fails to teach in paragraph 0157 the specific claim recitation of "arbitrarily" recording positional information image however it is examiner's position that Silverbrook et al. still teaches the limitation as specifically cited in rejection above and therefore the claims are still rejected under 35 U.S.C. 102(b) in view of Silverbrook et al..


Communication with the USPTO

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rene Garcia, Jr. whose telephone number is (571) 272-5980. The examiner can normally be reached on M-F 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Rene Garcia Jr
12/06


STEPHEN MEIER
SUPERVISORY PATENT EXAMINER